local form, until finally succumbing to the same influences. A good deal of what we are now warranted in assuming, is merely reasonable conjecture in default of experiment, but more and more facts are becoming known, all tending to throw light on the origin of species, and in this progress the study of Butterflies and Moths has proved of the greatest assistance to naturalists and philosophers.

As a special illustration of the study of the probable origin of our North American fauna I may attempt a brief discussion of the genera of our Hawk Moths, and present some tables of the different categories. We have seen that there are three proximate sources for our fauna. 1, Descendants of an Arctic Tertiary fauna. This fauna was forced southward and apart by the last Glacial Epoch, the species descending into Central Asia, Southern Europe, and the American tropical and subtropical region. This category includes species now identical in Europe and America, and which have not been introduced by commerce in historical times, while these latter form a distinct sub-category. 2, Descendants of the North American Tertiary fauna, the members of which latter occupied about the same limits that their descendants do to-day, probably they ranged further to the North. 3, Descendants of an immigration from the South. This stream is still of yearly occurrence. A colony, as we have seen, has been planted in South Florida from the West Indies and South America. Probably also, on the decline of the Ice Period, certain species of South American origin settled permanently and became modified by their residence in the regained territory. This category includes forms permanently domiciled and also such as visit us merely during the summer and do not survive the winter. As belonging to the first category in the Sphingidæ we have the genus *Hemaris*, which in Europe has only two species, but with us from 12 to 15. (The series *Tenuis*, *Diffinis*, *Marginalis* and *Axillaris*, ranging from Canada to Texas, have probably the same origin as the European *Fuciformis*. And we have a distinct sub-genus, *Haemorrhagia*, which contains at least two distinct species, *Thysbe* and *Fuscicaudis*. If we are to believe Mr. Hulst, *Uniformis* is a dimorphic form of *Thysbe*, differing, as I pointed out, by the evenness of the inner edge of the terminal band of primaries. Now the typical series of four species of *Hemaris*, above mentioned, differ from each other in much the same way. In *Tenuis* the band is narrowest, tapering to anal angle, being *even* inwardly and the usual red apical spot wanting, or at